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Reforming Grain Marketing Systems in West Africa:

by

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This paper examines the foodgrain marketing problems of the West African Republic of Mali and analyses why numerous proposals for reform have proven infeasible or too difficult to implement. Among his principal findings are these: i) the Mali government is severely limited by physical, financial and organizational factors in what it can implement; ii) the present mixed system of marketing (government and private sector) cannot be easily patched up as recommended in some studies; iii) uncertainty over prices and general market disorganization divert farmer effort to cash crops and may reduce farmer willingness to undertake greater efforts or new ventures in grain production; iv) since existing cooperative organizations are instruments of government used mainly for grain requisition purposes, farmers are reluctant to set up true cooperatives which could better defend their interests; v) external assistance, including food aid and a line of credit in the Operations Account in Paris has diluted the impact of grain-marketing policies and allowed the Mali government to maintain policies without having to fully absorb the consequences; vi) until very recently, the government had not been presented with well-thought-through proposals. The author concludes that in any successful reform a state grain agency will have to play a major role -- even under "minimalist" assumptions about the state's role in grain marketing -- and that major improvements will result from indirect measures such as improvement and extension of feeder-road networks, better information on crops and marketing, and better dissemination of such information, closer attention to relaxing of production constraints on food grains, and improved policy analysis within government. Such indirect changes will widen the options for reform and increase the probability of their adoption.

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REFORMING GRAIN MARKETING SYSTEMS IN WEST AFRICA

A CASE STUDY OF MALI

The West African Republic of Mali may hold a record in the world of foodgrain marketing, price policy and storage: in the past five years, no fewer than eleven missions have studied Mali's problems in this area, and have written reports thereon.[1] And this is not an accident. Mali's difficulties have been and remain deep-rooted, and finding a way out is not simple. One happy result of all this attention is that Mali's grain-marketing system and price policies are unusually well documented. Since marketing and price issues are important in the country's rural development, Mali provides a highly pertinent case study. The nature of the problems -- the deficiencies of existing structures and policies -- are clearly observable, as are the obstacles to reform; and in many respects, the Mali situation has close parallels throughout West Africa. This paper focuses on the question: why has reform proven so difficult?

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[1] FAO, Rapport au Gouvernment du Mali sur le probléme de la Commercialisation des céréales (The Panhuys Report), 1973. République Française, Bureau de Développement de la Produciton Agricole (BDPA), Mission de Restructuration de l'Office de Produits Agricoles du Mali (OPAM), Mai 1975. Mission de réstructuration de l'OPAM, Ph. Richard et X. van den Berg, 1976. EDPA, Séconde mission de réstructuration de l'OPAM, 1977. République Française, BDPA, Rapport de mission relatif à la réstructuration de l'OPAM et à l'organisation du marché des céréales, Ph. Richard et J. Herpin, Novembre 1977, 2 tomes. Institute de productivité et de gestion prévisionnelle (IPGP), Rapport final de la Commission interministétielle sur la réstructuration de l'OPAM, 1976. IDET/CEGOS, Etude des structures de prix et mécanismes de la commercialisation des mils et sorgho, 1976, 3 tomes. CILSS/CLUB du SAHEL, Working Group on Marketing, Price Policy and Storage, Marketing, Price Policy and Storage of Food Grains in the Sahel - A Survey, 1977, 2 volumes. OPAM/Agroporgress, Implantation optimale des stocks, W. Sachers, 1976, 49 pp. OPAM/Agroporgress, Etude des problémes de la commercialisation du mil/sorgho pendant la campagne 1976/77 dans les régions de Sikasso, Ségou et Mopti, W. Sachers. CILSS/Club du Sahel, Etude sur le stockage des céréales dans les pays du Sahel, 1978, 2 tomes.

I. Deficiencies in Marketing Performance and Policy

There is little disagreement in most of the reports, and in the understanding of concerned Malians, about the kinds of inadequacies that characterize grain marketing performance and policies in Mali. These diagnoses have been described in detail elsewhere.[1] Here we will only summarize some of the main problems.

A. Policy Objectives Not Met

First, the present marketing policies are failures when judged by their own objectives. The main objectives of the present marketing policy, as these are conceived by Malian representatives and written in relevant documents, are first, to control (maitriser) the grain market, so that producers can be guaranteed a renumerative minimum price; secondly, to guarantee grain supplies for deficit regions, including urban areas; thirdly, to stabilize prices to both consumers and producers. Related objectives are the protection of peasants against possible exploitation by traders and the development of "orderly" trading arrangements.

It is not uncharitable to observe that none of these objectives have been achieved. As can be seen in Table I, one-half to three-quarters of the total volume of marketed millet/sorghum passes through the "traditional" sector -- i.e., private traders. In addition, the state grain trading agency, the Office des Produits Agricoles du Mali (OPAM) has not been able to maintain a floor or ceiling price on grain purchases and sales, nor has it been able to stabilize consumer or producer prices seasonally or inter-annually. Table II is indicative.[2] Moreover, OPAM does not even

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[1]Cf. CILSS/Club du Sahel, Marketing, Price Policy and Storage of Foodgrains in the Sahel, A Survey, (CRED, University of Michigan, 1977) Vol. I, and this section on Mali in Volume II.

[2]See, for additional data on between official and actual market prices for foodgrains, CILSS/Club du Sahel, 1977, Vol. I, p. 54.

Table I - Estimated Total Marketings of Millet/Sorghum, and Amounts Marketed Through "Official" Channel, 1960-1978.

(000 tons)

	1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70	1970/71	1971/72	1972/73	1973/74	1974/75	1975/76	1976/77	1977/78
TOTAL MARKETINGS[1]	125	124	130	129	98	108	111	125	84	90	107	107	94	99	128	130	120	119
OFFICIAL PURCHASES[2]	20	21	29	16	17	26	57	60	8	26	12	29	11	9	40	71	n.a.	n.a.

SOURCES: CILSS/Club du Sahel, Marketing, Price Policy and Storage of Foodgrains in the Sahel, Vol. I, p. 41; FAO, Report on Cereals Policy in Mali, 1978.

[1] 15% of estimated production.

[2] After 1965, OPAM purchases.

Table II - Official and Actual Market Prices for Foodgrains (Feb. 1978)

(MF/kg)

	OFFICIAL PRICE		ACTUAL MARKET PRICE	
	Producer	Consumer	Producer	Consumer
Millet/Sorghum/Maize	56	56.50	30.50	150
Rice (Paddy Blanc)	45	-	-	-
Rice (Rm 4 0)		137.	-	300

SOURCE: FAO, 1978

supply most of the grain to deficit regions; it was estimated in the mid-70s that private traders handled 60 percent of the grain supply in the remote and particularly food-scarce Sixth Region.

The reasons for these failures to attain stated objectives are well known. OPAM's shortages of financing, storage capacity, trucks, and personnel played a part. Inflows of food aid and the demands of the 1972-74 drought led OPAM to play a major role in channeling imported grain, to the neglect of its internal marketing role. A price policy imposed on it by government (low consumer prices for millet and sorghum) reduced its liquidity, and a policy of purchases and sales at uniform national prices led to further operating deficits and a reduction in liquidity. At least up to 1976, the slowness with which the grain quotas were set and delays in release of crop-financing funds by the banking system meant that OPAM was never even present in the market until January, after the peak post-harvest marketing period was over.

Thus, OPAM and the existence of a legal monopoly has not protected the producer against presumed "exploitation," as it was designed to do. Nor has the hope that state grain marketing would impose a more orderly and efficient organization on the grain trade been borne out by experience. There is considerable uncertainty over marketing responsibility not only between public and private sectors, but within the public sector as well. For example, ambiguity over marketing jurisdiction has recently arisen between the cooperatives, OPAM and Operation Mils-Mopti, which has taken over responsibility for grain marketing in the area of its activity.[1]

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[1]A recent evaluation report comments: "After the beginning of the 1976-1977 campaign the government suddenly decided that in the Bankass and Djenné cercles the existing cooperatives would take over the grain collection and deliver directly to OPAM. It is, however, expected that this was only a temporary measure (the reason of which is not officially known) and that in the coming season Operation Mils will again be charged with commercialisation in its whole intervention area." Mahamadou Berthe and G. Olaf Meyer-Ruhle, Report on the First Joint Evaluation of Operation Mils-Mopti, Mopti/Bamako, April/May 1977, p. III-10.

B. OPAM Operating Deficits and Inefficiency

In recent years the Mali on economy has been characterized by severe budgetary and balance of payments disequilibrium. Budget deficits from 1972 to 1976 were between one-fifth and one-third of total expenditures and closer to one-third of recurrent revenues. During the same period the overall balance of payments showed large and growing deficits, amounting to between 20 and 50 percent of recorded imports.

The accumulation of debt by OPAM (and other public enterprises) was a major factor in the economic deterioration of the 1970-76 period. During these years OPAM accumulated a debt of 38 billion MF (about $80 million), 12 billion of it in 1974 alone; this was equal to 40 percent of total budgeted government expenditures during that year.

Some of this debt arose during the 1972-1974 drought, when Mali imported large amounts of grain to stave off famine. These imports were sold at heavily subsidized prices and were financed by bank credits to OPAM. But much of it arose from the too-small margins between OPAM's buying and selling prices for grain, which make it impossible for the agency to cover its marketing costs.

A significant proportion of OPAM's deficit also derives from management inefficiency, particularly with respect to transport and storage operations. Transport deficiencies commonly delay movements of grain stacked outdoors under tarpaulins, exposing it to the first rains. The CEGOS Report is only one of the many which refer to substantial losses because of poor storage management. The burden of these losses is passed on to producers and their cooperatives, removing any direct incentive for OPAM to improve its performance.[1] In other cases, grain stored indoors suffers heavy losses because of insufficient or improper fumigation, infested sacks, failure to rotate properly.

1...if not stored properly, grain delivered to OPAM deteriorates rapidly. Each year important quantities (thousands of tons) can't be carried away before the onset of the rainy season and are thus rendered unfit for consumption. The loss is absorbed by the producers, if OPAM hasn't already paid them and by the cooperatives, if OPAM's funds were distributed, since OPAM demands repayment." (IDET/CEGOS, op. cit.)

C. Poor Marketing Services

The private grain trading system is undeveloped. The number of individuals working exclusively as traders is very small. More important, there is extremely little specialization in foodgrains, just as there appear to be very few traders who are full-time traders and nothing else, so there are few traders who work at the grain trade alone.[1] Most buy and sell consumer goods and other crops. All this means that the distinction between producers and traders is frequently obscure, as is the distinction between traders and consumers. The person who acts as millet assembler also trades in consumer goods, in rice, in groundnuts.

In addition to small scale and lack of specialization, the grain marketing system is characterized by poorly developed rural credit arrangements. Private traders do provide some credit, but it is unclear how much. Although it is widely believed that a substantial proportion of producer millet sales are made to pay off preharvest debts, such evidence as exists suggests that this is a relatively minor factor. The IDET/CEGOS study found that in only 15 percent of the villages they surveyed did traders appear before the harvest. They report that most of the sales which occur in the villages come from reduction of stocks as the new harvest approaches. The 1973 FAO (Panhuys) Report estimated -- very roughly -- that perhaps 5,000 tons of millet/sorghum were sold to traders in debt repayment at harvest time. This would have been less than 5 percent of marketed output.

Similarly, very limited amounts of grain are stored by traders. It is rare to find private traders with a storage capacity of as much as fifty tons. Most storage, like most trading activity, is mixed -- i.e., grain and other commodities, frequently including consumer staples like sugar, will be stored in the same place, generally a room or two in a rather rudimentary building.

The private sector marketing facilities provided to sellers of foodgrains are thus very rudimentary. By comparison with what is available

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[1] The CEGOS Report states categorically: "There are no private traders in Mali who deal in millet alone: millet purchases at the farmer level and wholesale are considered by the main agents only as a supplement to marketing of other products (especially sheanuts and groundnuts)."

for export crop producers, they are glaringly deficient, since the public grain trading agencies do not provide much more. Neither public agencies nor private traders maintain an effective presence in the villages. For first echelon storage (at cercle chefs-lieux) in the state marketing circuit, the farmer himself or the village authorities acting in the name of the village cooperative must arrange for transport of grain from farm to the cercle. But the "cooperatives" are paid too little by OPAM; costs of transport from village to the district (arrondissement) level are not fully covered. Sometimes the local cooperatives are not paid at all. Moreover, they (i.e., the farmers) must bear the costs if inadequate storage and transport delays cause losses of stored grain.[1]

Illustrative of the differences in public marketing services provided for cash crops and those for food crops is the fact that the Operations will send trucks to bring groundnuts to main storage points whenever a village or group of villages can assemble eighty sacks -- and this at no cost to the producers.[2]

It is much the same with other services normally provided by a marketing system: credit, trader-provided storage capacity, off-farm inputs. Credit is available via the export crop promotion agencies, as are fertilizers and other inputs. However, with a few exceptions (e.g., the Operation Mils-Mopti), food growers must rely on "traditional" sources of credit, little of which appears to be provided by traders. And a few input-provision schemes are available, except for export crops.

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[1]IDET/CEGOS, Op. cit. In its village survey, the IDET/CEGOS team notes that in almost 40 percent of the villages, peasants "spontaneously" declared that their costs of transport of grain to the arrondissement chef-lieux were not paid for. The cooperatives (Federations de Groupements Ruraux) take the rebate that OPAM gives for this purpose, to meet their own expenses. IDET/CEGOS, Op. cit., Tome III, p. 41.

[2]Center for Research on Economic Development, University of Michigan, Mali: Agricultural Sector Assessment (Ann Arbor: December 1976) pp. 119-120.

D. Negative Production Effects

It's not possible to know the extent to which inadequacies of marketing arrangements and policies have affected grain production. Table III shows existing estimates of output trends for major crops during the past twenty years. It's clear that until 1974 foodgrain production was stagnant or declining; the same is true for groundnuts, though not for cotton. But it's impossible to sort out the effects of marketing policy, price policy, general economic policy, and weather variations. (Given the data uncertainties, it's often not even clear what has to be explained.) One must nonetheless strongly suspect -- as so many observers have -- that the uncertain, thinly structured and relatively poorly-functioning marketing set-up has had negative effects on grain output and on producer willingness to sell.

E. Negative Equity Effects

The marketing system has many inequitable features. There is, first of all, the "quota" or requisition system, by which decisions are made on the amounts of grain which villages must deliver to OPAM at official prices. In a year of poor harvests, this system requires the delivery of grain at below market prices. Those whose grain is requisitioned may have to buy for their own consumption later in the year, at free market prices.

Similarly, until very recently, OPAM has had almost no motor pool of its own. It had to rely on truckers, both public and private, who were paid according to an officially-fixed tariff structure which was generally too low to make OPAM assignments profitable. As a result, OPAM (with local administrators) regularly "requisitioned" private trucks -- i.e., forced them to carry grain at the unprofitable edicted rates. One consequence was that many transporters took their trucks into neighboring countries when the buying season began.[1]

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[1]Sidiki Tementao, Analyses due Système de Commercialisation des Céréales au Mali, Memoire, Ecole Nationale d'Administration, Bamako, 1977, p. 54. Tariffs have been revised upward since 1977, and OPAM has been endowed with a considerable vehicle pool of its own (some 40 trucks), the problem of transport requisition may be less substantial now. But it can be counted on to reappear as soon as prices change and/or OPAM's motor pool shrinks in size.

Table III - Production, Marketing and Official Producer Price of Principal Crops
1957-1978

	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77
	57/58	58/59	59/60	60/61	61/62	62/63	63/64	64/65	65/66	66/67	67/68	68/69	69/70	70/71	71/72	72/73	73/74	74/75	75/76	76/77	77/78
MILLET & SORGHUM																					
Production				833	827	867	863	651	721	737	830	558	603	715	715	624	660	850	865	800	790*
Producer Price		16	11.6	10	10	10	10	11	11	15	16	16	18	18	18	20	20	32	32	32	
RICE, UNHULLED (PADDY)																					
Production				160	145	200	189	192	162	162	172	134	161	137	157	116	130	250	260	257	200
Marketing					24	28	31	27	26	32	35	26	34	40	52	47	59	84	100		
Producer Price (Paddy Blanc)		12	12	14	8	11	11.6	12.6	12.6	16	18	18	25	25	25	25	25	40	40	40	
COTTON																					
Production				9	10	18	24	31	22	32	39	50	51	59	74	72	55	71	100		
Marketing				5	6	12	16	28	18	28	33	45	45	53	68	66	51	61	90		
Producer Price (1st Quality)	34	34	34	34	34	34	34	34	34	34	40	40	45	50	50	50	50	75	75	75	
GROUNDNUTS (UNSHELLED)																					
Production				122	138	167	182	173	153	159	119	96	136	156	152	135	132	188	205		
Marketing				54	63	67	74	50	27	40	29	33	57	74	60	50	43	70	87		
Producer Price		14.8	15.8	14	14	14	14	13	13	16	24	24	30	30	30	30	30	40	40	45	

SOURCE: CILSS/Club du Sahel, Marketing, Price Policy and Storage of Food Grains in the Sahel, Vol. I, Statistical Appendix; FAO, La Politique Cerealiere au Mali, Rome, 1978, Annex 3.

*Provisional estimate.

A third form of inequity arises from OPAM's normally limited capacity to meet demands in urban areas and deficit regions. A dual market is created, since a favored group is provided with OPAM's stocks at official prices, while others buy in the free market at a much higher price. Some idea of the magnitude of the differences is given in Table II; grain purchased in the free market in early 1978 cost two or three times as much as OPAM-provided grain. The 1978 FAO Report describes the consequences as follows:

> ... When (OPAM) has insufficient stocks it reduces the quota which consumer cooperatives receive for delivery to households. These households then must buy on the free market, often at twice the prices. As for the public sector, and civil servants, the quota is generally maintained, which makes these consumers a privileged group. But they are only 2 percent of the labor force...

II. Obstacles to Reform

If it is true that most technicians would agree with the main elements of the preceding diagnosis, then the question arises: why has it proved so difficult to make appropriate changes? After all, as we noted at the outset, Mali's grain marketing and price policy arrangements have not gone unstudied, nor is there any lack of proposals for change.

A. Politics

One part of the explanation must be found in the political environment. The political factor is indeed obvious and always mentioned. The Malian political authorities have persistently hesitated to raise official foodgrain prices to urban consumers, presumably because of unwillingness to risk severe political reaction. Their perception in this matter may be right; examples of disturbances and political upheavals have in fact frequently followed efforts to eliminate food subsidies enjoyed by urban populations -- for example, in Egypt and Peru in recent years.

The political factor is clearly present and important. Two aspects of it are worth special comment. First, it is evident that reformers, particularly outsiders, tend to give less weight to the political risks

of change than do the political authorities concerned. This is true even where the objective political realities are similarly perceived. But such similarity in perception is rare; reformers will naturally tend to see fewer risks than politicians.

Secondly, in Mali in particular, the authorities appear to have been especially sensitive politically, and hence especially resistant to risky policies. This is reflected in the economic policies and performance record of the past decade. Of all the francophone West African countries, Mali has had the most persistent balance of payments deficits and the most persistent budget deficits.[1] These deficits have also been the largest, relative to the size of the economies in question. In Niger and Upper Volta, countries similar to Mali in many ways, and also under military rule in the last decade, public expenditures have risen by about 6 percent a year; in Mali the rise has been about 15 percent. The major source of the budget deficit is generally said to lie in the Mali government's policy of hiring secondary school and university graduates. But such a policy does not exist in neighboring states.

The employment policy is only one of several elements suggesting that the Mali Government has tended to be more anxious than similarly placed governments to avoid imposing reductions in income and economic welfare on the bulk of its urbanized population. Its import policies in 1973 and 1974 are another indication. Mali's total tonnage of food imports (aid and purchases) was higher than any of the other drought-afflicted countries of the region; in 1974, the Mali government paid out of its own resources for 55,000 tons of rice, at a time when lower-priced coarse grains were available. Similarly, Mali was the last of the Sahel states to raise official consumer prices for foodgrains closer to world prices; it held out until early 1975 while the other governments of the region let prices rise in the fall of 1974. Similarly, Mali's wage policy response was somewhat faster and stronger than its neighbors, as Table IV shows.

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[1]Chad, in the midst of a civil war, may have had budget deficits which were as large a share of total expenditures as in Mali.

Table IV - Wage Changes by Skill Level, 1967-1975

(1967-1969 = 100)

	1970	1971	1972	1973	1974	1975[1]
Mali						
Unskilled Rate (SMIG)	100	100	100	136	193	217
Middle-level Manpower Rate[2]	100	100	100	100	111	116
University Graduate[3]	100	100	100	103	109	115
Niger						
Unskilled Rate (SMIG)	100	100	100	100	140	160
Middle-level Manpower Rate	100	100	100	100	100	112
University Graduate	100	100	100	100	100	104
Senegal						
Unskilled Rate (SMIG)	100	100	100	106	145	212
Middle-level Manpower Rate	100	100	100	100	120	136
University Graduate	100	100	100	100	109	121
Upper Volta						
Unskilled Rate (SMIG)	99	99	100	109	134	150
Middle-level Manpower Rate[4]						
Consumer Price Index, Capital City (1970=100)						
Mali[5]	100	121	130	168	194	-
Niger	100	105	115	128	137	-
Senegal	100	106	114	135	147	-
Upper Volta	100	102	99	107	116	-

SOURCE: Berg, The Recent Economic Evolution of the Sahel (CRED, 1975) pp. 118, 122

[1] January

[2] Typical rate, middle-level worker, Civil Service (except for Upper Volta, where it is private sector rate).

[3] Starting rate, University graduate (Licence), civil service.

[4] Actual rate, one employer, private sector.

[5] Foodstuffs only.

Mali's grain-marketing and price policies, then, are part of a larger pattern of economic policies which shows not only an unwillingness to risk urban political unrest but a more general unwillingness to accept tough discipline in economic management. There are many reasons for this.[1] One of the most fundamental is the existence, in the French Treasury, of the line of credit known as the Operations Account. Mali has been able to incur large budget (and balance of payments) deficits by drawing on the Operation Account. There are really two factors at work here relevant to grain marketing reform: the Malian government has been especially reluctant to impose hard choices in grain price policy, and it has been able to avoid these choices -- as it has been able to avoid or soften similar unpleasant constraints in the budget and credit areas-- by drawing on its line of credit at the Operations Account.

B. Different Donor-Recipient Perceptions

A second obstacle to reform or, more generally, to the introduction of economically efficient policies, derives from the different interests and perceptions of the parties to aid transactions. What lenders might regard as economically efficient may not be seen as such by the borrowing country.

The clearest and most relevant example is in the area of storage programs and policies. On the basis of strict cost-benefit accounting (and risk questions aside) it may be possible to demonstrate persuasively that a foreign exchange-based food security policy, with a relatively small "first line of defense" emergency reserve, is the most cost-efficient strategy for Mali. This would involve a public, centralized storage capacity of far less than the hundreds of thousands of tons now existing or envisaged. But from the Mali government's point of view things look different. There is, first of all, the fact that the Malian authorities will see greater likelihood of famine and will weigh its impact more heavily. But aside from this, the Malians know that there are almost no opportunity costs to aid funds available for grain storage facilities. From the local point of view, only if discounted future local costs of silo maintenance and operation exceed discounted benefits will it be advisable to adopt an "objectively determined" cost-effective solution.

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[1] See E. Berg, The Recent Economic Evolution of the Sahel, 1975, Center for Research on Economic Development, University of Michigan, Ann Arbor.

In these circumstances, it is not surprising that large increases in storage capacity have occurred or are under consideration not only in Mali but throughout the drought-prone Sahel; and this despite the generally shaky analytic and technical support for the storage strategies implied. It's not hard to see why local perceptions and local interests tend to prevail in this area. Silo construction is relatively cheap; silos are attractive to donors because of their visibility and their apparent contribution to a politically attractive goal; they can conceivably bring dramatic benefits in time of catastrophe; and there are many competitive donors anxious to help in food security matters.

C. Underestimate of Present Defects

Many Malian officials and other observers are fully aware of the deficiencies of the marketing sy[illegible] as outlined earlier. The public position most often expressed b[illegible]ponsible local officials is to recognize these problems, and to suggest that the reasons for them lie not in the structure of the situation but are rather due to OPAM's lack of resources and experience. They point out that OPAM is, and has always been, short of credit for financing crop purchases, short of trained staff, without its own transport facilities, and with only limited storage capacities. They also point out that the extraordinary demands of the drought years made it impossible for OPAM to meet its marketing/price policy objectives, and that indeed OPAM's operational life has been too short for any meaningful evaluation.

Because this general issue is so central to the understanding of marketing/price policy questions and to the problem of reform, it is important to address it directly and at some length. The defects of the marketing system are in fact structural in nature, not incidental or transient. The present system[1] contains a number of basic contradictions, major flaws which cannot be eliminated except by transformation of its essential characteristics.

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[1]The "present system" has the following central features: partial, fictional state monopoly of the grain trade; purchase of part of the crop at fixed prices by imposition of quotes; sale of publicly purchased grain mainly in cities and other deficit zones; use of price averages ("per-equation") such that official producer prices are uniform nationally, and official consumer prices are similarly everywhere uniform.

1. Difficulties of Peaceful Public-Private Sector Coexistence

First, the peaceful coexistence of public and private sectors in the grain trade requires that prices be the same in both sectors. If not, grain sales will tend to flow to one or the other sector, depending on size, as is presently the case. As things now work, if the official producer price is above the market-determined price, farmers will sell to OPAM, if they can. Thus, in years of bountiful harvest, OPAM can buy all the grain it wants, or for which it has financing and storage capacity. In lean years, it can buy little. This tendency can be clearly seen in OPAM's pattern of purchases in recent years: it is able to buy in insignificant quantities in a year of poor harvest and high market prices; peak purchases are almost always made during the bumper crop year.

This all-or-nothing tendency can be avoided only in one of two ways. One is for the government to abandon any positive price policy. The government's official producer price would be the same as or close to actual free market prices. This presents an obvious inconvenience: it means abandonment of a primary raison d'être of the state trading system itself. The second solution is to make available the financial resources and storage capacity required to implement a true price stabilization effort. OPAM could then buy for a buffer stock in good years and sell in lean years. Intra-annually, similarly, OPAM would support grain prices near their desired level by buying during the postharvest period and selling during the soudure. The question is; to what extent is such stabilization feasible and desirable?

The question of stabilization will be taken up later, but here it can be noted that inter-annual price stabilization is certain to be very expensive in Malian conditions because of (i) wide swings in rainfall, output and especially in marketed supply; (ii) a possible tendency for farmers to substitute public storage for some village-level private storage; (iii) risks of heavy storage losses. Its desirability is also open to question on the grounds that if successful, it could destabilize producer incomes from foodgrain sales, a result which may not be in line with public policy objectives. Most important, if price stability encourages production of foodgrains for the market, and/or if -- as is likely --

the stabilized price is higher than the average market-determined price,[1] then additional marketed supply might be called forth in volumes burdensome to the economy.

Just as price differentials create awkward conditions on the producer side, so do they create problems on the consumer side. Whenever prevailing market prices at the retail level are higher than official retail prices, farmers, traders and some consumers have strong incentives to bypass the state structure and deal with each other directly.

The existence of a private trading sector imposes restraints also on another basic aspect of state grain price policy: the principle of uniform grain prices over the whole national territory. This "péréquation" principle can be pursued by OPAM without involving losses (deficits) only if losses incurred by OPAM activities in areas where marketing costs exceed the average are balanced by profits from purchases and sales in markets of easy access (hence lower then average) costs. But in a system of coexisting public and private trading sectors, the private traders occupy the profitable markets and leave the unprofitable ones to the state agency. The traders buy where and when producers offer grain for sale at relatively low prices -- i.e., in the more productive regions, and those served by better roads, at harvest time. They sell, similarly, in the most attractive markets (especially Bamako and the other towns) where unit marketing costs are relatively low. OPAM is constrained to buy and sell everywhere, and at the uniform national prices. Under the circumstance, there is no way OPAM could avoid deficits; if its buying and selling prices were fixed at levels reflecting true average costs, the result would be to abandon the market to the private sector. Or, of course, uniform national pricing would have to be abandoned.[2]

A related problem has to do with smuggling. So long as private

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[1] i.e., that the price-stabilization scheme is not a "pure" stabilization effort, but has price-raising intent.

[2] Some other means might be sought to implement the government's objective of favoring remote and uncongenial regions. Grain transport costs, or all transport costs, could be directly subsidized; civil servants (and other wage earners) could be given a salary supplement, etc.

traders are allowed to operate, and a policy of uniform national pricing continues, there will be a strong tendency for grain to move over frontiers. Only if the government could effectively impose an export monopoly (or assure harmonized pricing policies around frontiers) could extensive smuggling be avoided. This, incidentally, provides additional incentive to seek alternative means of meeting the government's regional equity objectives, to the extent that such goals are of high and continuing priority.

Another fundamental problem in the mixed trading system has to do with price and quality differentiation. The state trading sector cannot effectively compete with the private traders unless it sets down a much more refined price structure than now exists. At present, extremely little differentiation exists. OPAM offers the same price for millet, sorghum and maize. Prices are the same for different kinds of millet and sorghum (e.g., white millet and red millet). Buying and selling prices do not differ with respect to the quality of millet and sorghum.

The more egregious aspects of this homogeneity could presumably be dealt with relatively easily -- i.e., different prices for millet, sorghum, and maize. But even here, delicate decisions might be required, and wrong decisions could lead to serious distortions. What should be the relative prices of maize and sorghum, red millet and white millet? Demand conditions vary from region to region and year to year, as do supply conditions, due to rainfall variations. Unless it reproduces the private sector price structure, OPAM risks finding itself with unwanted surplus stocks of some grains and recurring shortages of others. Or, if OPAM enforces a price structure on the private sector it could give wrong signals to producers -- e.g., as at present, paying "too much" for sorghum relative to millet and making sorghum more profitable to produce,even though it may be relatively less desired by consumers.

Quality differentiation poses even more problems. Under the present system, OPAM gets the worst quality grains, since it pays the same price regardless of quality. For OPAM to try to reproduce the rich variety of quality and price differentials that typify even the most isolated rural market is almost unthinkable. It would require enormous manpower and surveillance and would involve so much bureaucratic discretion as to invite extensive abuse, particularly if used in conjunction with the

quota system for requisitioning grain. In the long run, farmers would only sell to OPAM if the quality gradings and price differentials available there were as favorable as in the private market.

2. Difficulties and Injustices in Primary Marketing

The organization of the state sectors crop purchase is extremely cumbersome. The system works as follows. Crop size is estimated in every village in July. These estimates are sent to the Commandant de Cercle, who - advised by a cereals committee - transmits these estimates to the Governor of the region. The Governor sends the estimates to the Ministry of Interior, which then determines the quota of grain which will be required of each district (arrondissement). This arrondissement estimate is taken as a quota which the administrative head of the arrondissement must deliver to OPAM at the cercle headquarters, whence it is stored or shipped to deficit regions.

At every step of the way, their arrangements give rise to grave problems and potential abuses.

a) In July the villagers have only a very rough idea of the size of the coming harvest. They have, in any case, every incentive to understate their estimate. The arrondissement head also tends to make minimal estimates, so as to reduce his risks of non-performance. The encadreurs have an interest in overestimating production, however.[1]

b) The primary marketing is traditionally the responsibility of the cooperative organizations, the groupements ruraux. But these are administrative units. Membership is obligatory. The executive committee of the "cooperative" is frequently the village council. The Federation des Groupements Ruraux is chaired by the regional administrative head. In

[1] Hans Guggenheim points out the tendency for young encadreurs "to feel that their pride is involved in producing high yield figures and in commercializing as much as possible". (H. Guggenheim, Traditional and Modern Techniques in Grain Storage and Transportation: Problems and Solutions for operation Mils-Mopti, Report to AID/Bamako, Jan. 1977, p.12). He also mentions one village where the quota one year was 40 tons, and the commandant asked for 400 tons the next year. The quota was finally fixed at 160 tons. Given the lack of knowledge of yields and output, it is easy to see how such problems could arise.

general, then, there is no arms-length relationship between "the administration" and the "cooperatives". So the whole process of quota determination tends to set farmers against the government. When the quotas cannot be met, force is used - "arguments of authority" as the IDET/CEGOS Report puts it.

c) The system of *previsions* is often not completed until December, but this is too late for OPAM to take account of the estimates in its financing request to the Malian Development Bank. So the credit allocation to OPAM is not only based on uncertain crop size estimates, but very late as well. This seems to be the main reason why, in most years, OPAM has been unable to enter the market immediately at or near harvest time (September-November), when sales are at their peak.

d) The "cooperatives" (i.e., the farmers themselves) are responsible for transporting their quotas from their fields to the *cercle*, where OPAM's responsibility begins.[1] At best, the payment made by OPAM for this service is (or has been) below costs: in fact, very often the FGR keeps the OPAM transport rebate (*frais de collect*) "with or without the agreement of the producer".[2]

e) The FGR has to rely on private transport. Until 1978, the official tariff was too low to induce truckers to carry grain, given the lack of back-haul cargo, long waiting times, bad roads etc. So the truckers have been frequently "requisitioned" - i.e. forced to carry grain. As noted earlier, this leads some transporters to take their trucks out of the country at harvest time, thereby accentuating the shortage of transport.

f) Organizing the primary marketing and seeing to transport and storage involves senior administrative officials in the demanding and complex business of the grain trade. The radios and trucks of the *prefects* and *commandants de cercles* are mobilized in the annual effort to coordinate truck movements. The administrative officials can force truckers to take assignments. Many missteps inevitably occur: in one area trucks may be

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[1] The *groupement rural* (village) takes it to the district (*arrondissement*) headquarters, the Federation des Groupements Ruraux takes it from there to the *cercle*.

[2] IDET/CEGOS *Report*, Vol. II.

sent for a delivery which is too small. Elsewhere, not enough transport is made available, so the grain stock cannot be picked up before the rains begin.

g) On the consumer side there are further anomalies, at least as of 1977.[1] The "cooperatives", in addition to purchasing and transporting the crop, are responsible for sales to rural consumers. In theory they buy millet and sorghum from OPAM's warehouse at the cercle chef-lieu. They sell it to their constituents with a legally prescribed mark-up, an amount generally insufficient to cover the costs of moving the grain by truck from cercle to arrondissement. What is especially striking is that the cooperatives can't keep grain themselves, for sale to their members, because of OPAM's legal monopoly. They must sell grain at OPAM's retail price. The farmers thus are given no incentive in the official marketing system to store grain through their cooperatives. Nor do they have any incentive to utilize the official marketing chain. They buy and sell on the "traditional" (i.e., private) market.[2]

3. Distributional Inequities

These have already been described. It is the difficulty of avoiding them which is stressed here. So long as the state sector is responsible for only a portion of the crop, and there persists a dual price structure, benefits and costs of the system will be unequally distributed. In bad years, losses will be suffered by those producers forced to sell to OPAM at the lower-than-market price. In good years, producer benefits will go to those who sell to OPAM at the higher-than-market price. Comparable inequities exist on the consumer side. Under the present arrangements the benefits of low offical retail prices go to the relatively well-off civil servants who tend to be fully provided by OPAM at the official price; others

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[1] Recommendations for change have been made, but it's not known whether they have been adopted.

[2] The IDET/CEGOS Report summarizes the situation this way: "Thus producers pay for this service (the storage of millet) which is performed by their own organization, and pay at a much higher price than it costs, and they pay to an organization which doesn't give the service (OPAM). The result is that when producers need millet, they trade with other producers in traditional markets..." (Vol. II.).

often have to pay two or three times as much as the free market. These perverse distributional effects could conceivably be reduced, and distribution of low-priced grain effected by such methods as "fair price shops" for low income people, but such finely-tuned distributional efforts are extremely burdensome administratively. How the distributional problems on the producer side could be handled is not obvious. Using higher-than-market purchase prices as an instrument of income distribution policy would demand great administrative and organizational inputs, might have undesirable incentive effects and might not be feasible anyway. It would certainly open up very substantial opportunities for administrative discretion and corruption.

4. The Worst of Both Worlds

As we have seen, the present trading system poorly provides the services producers seek in a trading system -- protection against monopsony, access to credit, transport, storage, and market information. Competition among buyers, stimulated by free entry into trade, is not legally encouraged or even allowed, but no stable and effective state-provided alternatives exist. One of the main justifications for public intervention in marketing is the presumed inequality of bargaining power of the peasant vis-à-vis the trader, but the present arrangements do not balance the bargaining situation. A relatively small share of marketed output is bought at the official price by the grain agencies. The bulk of primary marketing is still in the hands of private traders. Given the risks and uncertainties of the legal situation, there are fewer traders than there would otherwise be, and the price demanded by traders for their services is probably higher than it would otherwise be.

From a longer-term and development point of view, the present arrangements do not encourage -- perhaps do not even allow -- the strengthening of private marketing skills. Their ambiguity discourages technical progress in trading practices and techniques, the growth of trading capital, and the emergence of more complex entrepreneurial skills.

D. Conflict Between Private Trader Efficiency and Doctrinal Factors

The fact that the mixed system has grave disadvantages while the

preconditions for an acceptable coexistence between public and private trading sectors are so demanding, means that drastic modifications are called for if marketing deficiencies are to be effectively addressed. And this is where the fundamental problem for reformers emerges, for there are only two ways to go -- toward liberalization of the trading system (i.e., a greater role for private traders), or toward more thorough state control. And while the technical or economic advantages are overwhelmingly on the side of liberalization, doctrinal or ideological predispositions call for strengthening the state trading monopoly.

There can be little doubt about the substantial economic advantages of a private trading system as compared to a state grain trading monopoly.

a) The private or "traditional" grain trade uses resources more efficiently than state trading agencies. The supply of traders' services is highly elastic at relatively low levels of remuneration. Private trade is, for many thousands of Malians, a part-time activity. Farmers, urban workers, school children, women, all may do a little grain trading. They tend to do so in slack periods of the year. They also trade in connection with local market activities which have a social component. In such circumstances, the opportunity costs of engaging in trade are very low. It is the same with casual or informal traders -- chauffeurs and others with command over empty cargo space. These traders' services are offered in relative abundance and at low cost.

Even those who are full-time traders do not deal in grain alone. The volume of trading activity and the rate of return from grain trading seem too low to encourage specialization. Thus, costs of trading operations are shared by general trade -- in cash crops and consumer goods, as well as in foodgrains.

Since foodgrains are heavy in weight relative to their value, transport costs are critical, and it is in the transport area that the private trade has particularly large cost advantages. First, some considerable part of the privately-sold grain is brought directly to local periodic markets by the farmer or a member of his household. Secondly, some grain is moved between local and regional or national markets by the informal trader mentioned above. Most important, the specialized state grain trading agency normally faces fearsome cost problems because of lack of return cargo.

Especially in the remote regions, there is little cargo brought by truckers carrying grain from local chefs-lieux or wherever the primary bulking point is located. The private trade is much more economical in its use of transport -- for example, by search for two-way cargo, bulking delays, mixture of cargo, etc. What is true of transport is true of other inputs. The traditional trade in general uses human and physical capital more efficiently then the public trading structure. The latter requires formally trained manpower -- managers, accountants, clerks -- whereas the traditional trade relies on human energy and skills developed informally in the market place. Because it tends to be of larger scale and more complex, the state structure requires physical facilities -- offices, warehouses, trucks, cars, etc. -- which are more modestly provided in the traditional trade. It also requires inputs which are more scarce than physical and human capital: coordination, organizational capacity and information. A decentralized private trading system economizes on all these.

b) There are many well-known, general reasons why small organizations or private individuals tend to be more efficient than larger organizations, expecially state organizations: speed and flexibility in making decisions; freedom to hire, dismiss and reward; detailed and specialized knowledge of the activity in question; the stronger spur of material incentives. Many aspects of the grain trade do not lend themselves easily to large-scale operations.[1] To illustrate, one need only consider the probable difference between public and private responses to a situation of deteriorating grain stocks in a warehouse. The private trader would surely be more likely than a public servant to prevent infestations or improper rotation, find out more quickly if infestation existed, respond more quickly and appropriately (e.g., by forced sale at the best price). On the state side, incentives and capacities to prevent infestation are limited by personnel and budget constraints. The flow of knowledge to managers is slow and uncertain. The capacity to

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[1] This is to say that marketing activities which benefit from significant economies of scale in the circumstances of semi-arid West Africa are substantially outweighed by activities characterized by the quick onset of scale diseconomies.

respond to unforeseen local situations is limited by poor communications, lengthy administrative procedures and diffusion of responsibility.

But it is perhaps less the advantages of the free market solution than the disadvantages of the monopoly solution which provide the strongest arguments for liberalization.

a) Foodgrain market structures do not lend themselves to state monopolization. Grain is grown over much of the country. It is traded in thousands of villages and hundreds of rural periodic markets. As a result of tens of thousands of small transactions, the bulking function is performed: small traders put together marketed supply virtually bag by bag. The distinction between traders and farmers or consumers is generally fuzzy, and the informal or casual traders, who utilize transport capacity for small adventures into grain trading, play an important role. Moreover, Mali has thousands of kilometers of virtually open frontiers, with ready buyers on the other side. And for food crops there is an alternative not open with many export crops: increased storage or consumption.

b) Complications related to price policy arise in a monopoly situation. In a year of bad rains and short crops, cereals prices in intra-village transactions will tend to be higher than the state agency's price, as they will be in any permitted grain transactions. (Prices may also be higher in neighboring countries.) Farmers may, therefore, prefer: (i) to store more grain; or (ii) to sell only at higher than official prices (i.e., in a parallel market). It would presumably be necessary to extend the system of quotas, requiring delivery of all marketed grain to the state at official prices, with the implications of cost and coercion implicit in all such policies. Rigid controls over grain shipments would be required.

c) Imposition of an effective monopoly would require an agent of primary marketing to replace the traders who presently handle two-thirds of the marketed crop in most years. The prime candidates for primary marketing would be the cooperatives. But, as already stated, these are virtually non-existent in Mali, as autonomous producer organizations. They lack structure, money, trained staff warehouses, and transport. To give such embryonic organizations the task of primary marketing of food-

grains would overwhelm them.[1]

Because of the weakness of the cooperatives, proposals for fuller monopolization of the grain trade in Mali frequently recommend use of the opérations de développement, the regional development agencies which provide extension and other assistance to farmers on given crops in given regions of the country -- the Opération d'Arachides et de Cultures Vivrières (OACV) for example, or the Opération Mils-Mopti.

The regional development organizations have the technical capacity and administrative structure that is frequently lacking among the cooperative organizations. They also have marketing experience, since many of them are responsible for marketing the cash crops which are their major focus. Frequently, they have a large number of buying points and substantial transport capacity. They are, therefore, possible candidates for taking on the task of primary marketing.

Were they to do so, however, severe problems can be anticipated: the development agencies have shown themselves capable of attracting considerable resources from aid donors, and this explains their relatively strong administrative and financial position. Their success in attracting assistance has also allowed them to operate with relative autonomy. It has allowed them to attract and hold capable staff, by payment of better remuneration (especially fringe benefits) than is available in the Civil Service. The access to technical assistance in some cases has also helped. Also, access to non-budgetary funding has allowed these agencies financial flexibility beyond what is usual in the public sector.

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[1] A recent FAO paper comments as follows:

> ...cooperatives as forces for the encouragement of rural development, while offering such promise, tend to disappoint and too much must not be expected of them. Given good management and a clearly defined and limited role they can perform well...When they are allocated too many responsibilities they tend to sink beneath the burden...

FAO Agricultural Services Division, "The Catalytic Role of Various Types of Marketing Enterprises in Stimulating the Expansion of Local Production", paper presented at OECD/FAO International Seminar on Critical Issues on Food Marketing Systems in Developing Countries, Paris, 18-22 October 1976.

Despite their strengths, then, the opérations are vulnerable. It remains unclear how they will find internal sources of self-financing on a long-term basis. Their work of agricultural extension, combined with other activities that nowadays make up "integrated rural development", thus has a certain urgency. The hope must be that whatever happens in the decades ahead, the efforts of the development agencies will bring about irreversible and self-sustaining changes in agricultural practices in the direction of modernization and improved productivity.

The basic task of these agencies is the stimulation of production, providing the rural population with trained cadres, introducing new methods, more and better education, more and better equipment. The production task alone makes enormous demands on available resources in money and manpower. It might be imprudent to further burden these agencies with the marketing function.

This is especially so since past experience attests to the existence of price-making priorities which strongly tend to favor low consumer prices. A policy of low consumer prices for foodgrains, combined with high costs of marketing, can be expected to put pressure on the primary marketing agents, who may find that marketing of foodgrain is costing them more than they are being paid by the other agents further along in the distribution chain.

This has been the experience in Opération Mils-Mopti. The OMM buys the grain from farmers and transports it to OPAM storage depots in arrondissement-level chefs-lieux. The following quotations indicate the kinds of diversions and problems which have arisen:[1]

> OPAM is supposed to receive the cereals at the chef-lieux of the arrondissements, OMM being responsible for the transport from the collection points to the chef-lieux. However, since OPAM does not dispose of agents and storage facilities in most of those places and of sufficient (owned) or contracted) transport capacity the rule is that OPAM receives the merchandise only in the capitals of the cercles, thus increasing the transport volume of OMM.

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[1] Mahamadou Berthe and G. Olaf Meyer-Ruhle, Report on the First Joint Evaluation of Mils-Mopti, Mopti/Bamako, April/May 1977.

There are major difficulties in handling the grain after delivery by the farmers:

-insufficient transport facilities to meet the increased transport requirements,

-no storage facilities at the collection points (whenever OMM disposes of storage capacity - thought for storage of production inputs - it is used to the possible extent for temporary grain storage).

-delays in discharge and weighing at the OPAM reception points in the peak season (at the end of the campaign).

These shortcomings are causing losses of grain because of open-air storage with serious damages when evaluation is delayed beyond the start of the rainy season. Last year, OMM was involved in grain transport until the month of August which considerably affected their extension activities for the new season. However, since damages and losses are at the risk of OMM until the grain is handed over to OPAM, evacuation of the cereals constitutes a priority activity to the Opération.

OMM tries to recuperate sacks and money from farmers who have not delivered the envisaged quantities. Sometimes one or both of them cannot be recuperated. Figures of those losses were not available.

This suggests a final consideration: the impact on farmers. Grain marketing is full of uncertainties. Transfers of funds to finance crop purchases can be delayed or reduced. Transport, storage advances of credit for purchase of inputs -- all can create the kinds of pressures indicated in the OMM case. Good rains can create a tremendous disposable surplus which cannot be marketed at announced official prices or transported and stored appropriately. Bad harvests will unloose producer pressures to sell on parallel markets for higher than official prices. Unless an effective price policy is introduced, these price problems will be inevitable.

The involvement of the development agencies in primary cereals marketing thus sets loose a whole array of potential conflicts -- or at least adversary relationships -- between the development organization and its clients, the rural producers. There are high risks that resulting distrust

could affect peasant attitudes toward the development agency, its personnel, its productionist efforts.

For all these reasons, it would seem highly undesirable to give the Opérations full, or even major, responsibility for grain marketing. But other alternatives are either not feasible or scarcely more desirable. The absence of a suitable substitute for the private trader in primary marketing is a major constraint on state monopolization.

The present mixed arrangements, then, are disadvantageous from the point of view of both economic growth and social equity. They also have many elements of built-in instability. At the same time, introduction of more extensive state monopoly is inappropriate to the structure of grain marketing and certain to bring on heavy social, economic, and administrative dislocations. The conclusion would seem inescapable: private trade in grain should be legalized and private traders allowed, even encouraged, to perform marketing services.

The trouble, of course, is that this simple yet compelling conclusion runs up against deeply-held ideological convictions.

In Mali, as in so much of the world, there exists among urban people, civil servants, and intellectuals a widely shared vision or model of farmer behavior and rural market performance. The majority of farmers are believed to have intense demands for money income at harvest time to pay taxes and debts, meet the costs of marriages, and postharvest ceremonies and celebrations. They meet their demands for cash by selling part of their grain crop, but they sell it in the immediate postharvest period when prices are at their lowest. They buy back grain later in the year when prices are at their peak. Farmers are believed to be widely indebted to traders, who demand repayment at harvest time, paying the farmer extremely low prices -- i.e., exacting a very high real rate of interest.

All of this occurs, according to this view, in rural grain markets where the winds of competition are notably absent. Traders conspire to keep buying prices low. They easily and invariably exploit the peasant, who is seen in this view as isolated, lacking information, without alternatives, and denuded of means to [illegible].

The belief that grain markets work this way is extremely widespread,

in Mali as elsewhere.[1] However, there exist very few empirical studies which confirm this belief. The number of careful studies of the structure and functioning of grain markets is extraordinarily small, even in places like India where these questions have been the subject of heated controversy for decades.[2] One experienced observer's comment -- referring to South Asia a decade ago -- is still applicable generally.

> Much of what passes as analysis in the marketing literature represents little more than a repetition of the conventional wisdom regarding middlemen behavior with little or no empirical content...[3]

This sparsity of empirical studies supporting the model of the trader-entrapped peasant and the monopsonized market is certainly true of Mali.

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[1]Cf. United Nations, Economic Commission for Asia and the Pacific, "Problems of Marketing of Small Farmers in the ESCAP Region," Economic Bulletin for Asia and the Pacific, Vol. XXVI, no. 2-3. September-December 1975. p. 2.

> The stereotype of indigenous marketing systems for the small farmer is that it is exploitive, collusive, economically inefficient and operating with high profit margins for the trader. At the bottom is the small farmer, poor, often illiterate and unorganized, whose small volume of business is of poor quality, unstandardized, costly to handle and relatively unimportant to the trader. The general poverty of the small farmers and their chronic indebtedness to money lenders, who are often the traders who buy their produce, weaken the farmer's bargaining power, especially at harvest time. This weakness is aggravated by the farmers' lack of knowledge about prices and alternative marketing procedures...The inherent weakness of the small farmer means that he is an easy target for exploitation -- underweighing or under-assessment of the produce, charging high interest rates, etc...

[2]See Uma Lele, The Marketing of Food Grain in India, Cornell University Press, 1971. See also, G.R. Spinks, "Myths about Agricultural Marketing," Monthly Bulletin of Agricultural Economics and Statistics, Vol. 19, No. 1, Jan. 1970.

[3]Vernon Ruttan, "Agricultural Product and Factor Markets in Southeast Asia," Agricultural Cooperatives and Markets in Developing Countries. D. K. R. Anschel, R. H. Brannon and E. D. Smith, editors. New York: Praeger, 1969, p. 83.

To my knowledge, there are no studies which discuss more than casually the functioning of Malian grain markets. The CEGOS study, on unclear evidence, claimed that in 50 percent of the villages surveyed, some part of marketed cereals output was sold sur pied ("on the stalk"). But they also assert that most of the sales which took place in the villages came from stocks which were sold off as the harvest approached.[1]

It is no exaggeration to say that the "monopsonized market" model is at best unproved, at worst pure myth. Nor is it unfair to observe that it is a priori dubious, given the structural characteristics of grain markets in the country.

There exists an alternative model, a different way to see farmer behavior and market performance. The "average" peasant, in this view, reflects in his behavior hundreds of years of cultural experience and social adaptation. He plants as much grain as he will need to feed his household on the assumption of normal rains, with some safety margin. He maintains, at the village or household level, a storage capacity equal to at least one year's consumption, and perhaps two years, in order to protect himself against the bad rains he knows will come periodically. He knows very well that he will need cash income at the time of the harvest. He prepares for it during the dry season - by migrating or engaging in some local income-earning activity. He prepares for it also in his production decisions -- by growing cash crops, for example. He is perfectly aware that grain prices will be lowest at harvest time and highest during the soudure, and tries to arrange his purchase, sale and storage decisions accordingly.

According to this way of looking at things, similarly, the grain market is characterized by reasonably effective competition. Entry is easy.

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[1] IDET/CEGOS. Op. cit., Tome III. Panhuys mentions a Malian trading circuit of what he calls a "usurious" type, on which debts are reimbursed in kind at harvest time. Typically, he notes, 1000 MF were borrowed, and 100 kg/ of millet were given as repayment at harvest time. (This refers to the early 1970's). He estimated that perhaps 5,000 tons entered the market this way -- less than 5% of total marketed millet/sorghum. (FAO, Rapport au Gouvernment de Mali sur la Commercialisation des céreales ("The Panhuys Report), Rome, 1973, p. 12.

Anyone can become a petty trader; little is required in terms of capital or skill. Since incomes available in other rural occupations are relatively low, the elasticity of supply of traders' services is surely very high. Even the most isolated farmer need not sell his grain at an unsatisfactory price; all he has to do is journey to the nearest periodic market to sell it there, either selling it himself or giving it to a small trader to be sold. In the rural markets, there are always passers-by who act as casual traders, civil servants, bus drivers, truckers, others who are anxious to fill empty cargo space with grain to sell in the larger towns and whose presence gives a strong presumption of competition on the buying side, a presumption which would exist anyway because of the large number of traders in the market.

This second model of a calculating peasant and a competitive market is, of course, congenial to the preconceptions of many economists. But it is more than that. It also seems to fit well with what has been discovered by a number of recent studies in countries with socioeconomic and ecological structures similar to Mali.[1]

But, in the present context, the point is not the truth or falsity of these ideas; it is rather that the "exploited peasant/collusive market" model is the way most policy-makers in Mali see the world, and it creates an unwillingness to move the marketing system more openly and more fully into reliance on private trade.

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[1]Especially the important study of Henry M. Hays, Jr. The Marketing and Storage of Food Grains in Northern Nigeria, Samaru Miscellaneous Paper p. 50, 1975. See also, P. H. Giles, Storage of Cereals by Farmers in Northern Nigeria, Samaru Research Bulletin No. 42, Institute for Agricultural Research, Ahmadu Bello University (Nigeria), 1965; W. O. Jones, op. cit., and the studies on which it is based, particularly, E. Gilbert, Marketing of Staple Foods in Northern Nigeria: A Study of the Staple Food Marketing Systems Serving Kano City, Ph.D. Dissertation, Stanford University, 1969. The operation of cowpea markets in northern Nigeria is the subject of a recent thesis, which did intensive analysis of price behavior, marketing margins, storage, etc. Like the Hays study, the study concludes that there is "no evidence of monopolistic or large scale exploitative practices". Nathaniel Omatai Okiloko Ejiga, Economic Analysis of Storage, Distribution and Consumption of Cowpeas in Northern Nigeria, Ph.D. thesis, Cornell University, 1977.

E. Poor Reform - Mongering

The policy analyses done for and/or by the Malian Government contain numerous proposals for marketing reform. All of these have, however, had serious ambiguities or flaws which have reduced their relevance and suitability. One set of proposals suffers from narrowness of focus; these can be called the "improvement" proposals. A second set of proposals for fuller state monopolization leaves unanswered many fundamental questions, which render it inapplicable. The most recent reform proposal, involving greater liberalization, is more fully developed than previous analyses, but also has questionable aspects.

1. "Improvements"

These aim at improvement of the present arrangements, without raising fundamental questions about the allocation of marketing responsibility between state and private sectors of the scope of price policy. An unfriendly critic might call these "band-aid" proposals. They focus on specific and immediate problem areas, not the system as a whole.

One example is the 1973 FAO Report (the Panhuys Report).[1] Although quite far-reaching in its discussion of the marketing system and its deficiencies, and generally perceptive in its diagnosis, the principal proposed change in this report is that official grain prices be raised by a specific amount.

A more striking example is the 1975 report of the Paris-based Bureau de la Production Agricole: Mission de Restructuration de l'Office des Produits Agricoles du Mali (OPAM), done under the auspices of the French Ministry of Cooperation. This document analyzes the structure and functioning of OPAM and concentrates on internal administrative factors which contribute to its inefficiency. Although there is considerable discussion of OPAM's "relationship to its external environment", no questions are raised about the terms of coexistence of the private sector nor about the

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[1] FAO, Rapport au Gouvernment du Mali sur le problème de commercialisation des Céréales, Rome, 1973.

nature and limits of price policies. The drafters of this report explicitly reject structural changes relating to OPAM's role:[1]

> It should be noted that some people we talked to urged that OPAM's role be more limited, more oriented toward imports, storage and the supply of towns and grain-deficit regions, leaving buying responsibility to the opérations in millet, maize, rice groundnuts and cotton and sales to other, better-adapted organizations.
>
> In addition to the fact that this proposal would lead to a considerable reduction in (OPAM's) monopoly status, it is not clear that overall efficiency would be improved by allocating (grain purchase transport/ storage and sale)...to three different institutions.

2. Fuller State Monopolization

The second category of reform proposals recognizes the elements of basic instability now existing. The proposals address this problem directly, by suggesting a strengthening of the state monopoly. This was the principal recommendation of the 1976 CEGOS study which was financed by the World Bank and which was intended to be a comprehensive, if not definitive study of the problem.[2]

The CEGOS Report provides much useful material on how the marketing system works and is unsparing in describing its deficiencies. The report makes recommendations on a broad front. It urges that producer prices be increased, that quality grading be introduced, that marketing margins be increased and the barèmes be made more realistic, that peasants be allowed to repurchase grain from OPAM at a price closer to the producer price. A series of recommendations are also devoted to improvement of OPAM's administrative and financial situation: that OPAM's debts be lightened, that it be given adaquate working capital, that the banking system release credit for crop purchase earlier and more flexibly, that OPAM's grain storage capacity be increased, and that a drought reserve stock of 60,000 tons be

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[1] BDPA, 1975, p. 68

[2] IDET/CEGOS, op. cit., 3 tomes.

established.

Most of these recommendations, and others not mentioned, were addressed to real problems and are generally acceptable, but the major structural proposals that raise questions.

First of all, the report recommends exclusion of private traders from the primary marketing and the wholesaling of foodgrains; the traders would be restricted to retailing. No real justification is presented; in fact, the report gives limited attention to the question of market structure. It asserts in passing that grain markets are monopsonized. Thus, in discussing farmer revenues from grain production, it states:

> ...when crops are short, (farmer) incomes are cut due to the shrinkage of marketed volume...; the rise of prices on the parallel market does not re-establish the level of income from food crops because only a small part of the increased retail price is transmitted to farmers, because of agreements among traders.[1]

The considerable problems implicit in this proposal are very summarily treated. The role of primary marketing is given to the FGRs (the "cooperatives"), whose non-operational character the report elsewhere recognizes. The FGRs lack staff, structure, experience, resources, even autonomy from the administration. Yet the CEGOS report proposed they be given trucks and other equipment and a full monopoly over purchase of the grain crop. The private transport of grain from surplus to deficit regions would be prohibited by this proposal, but only a line or two is devoted to the administrative implications and none to the economic implications. Finally, even the restricted role left to the private sector is, it turns out, quite untenable. This extraordinary admission is worth citing in full:

> The control of the leading retail trade would consist essentially of making sure that traders sell at official prices and that they sell "OPAM

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[1] It should be noted that no reference to such price agreements are are found elsewhere in this report, nor are any other studies cited as evidence.

> brand" grain. The system would only permit the escape outside the OPAM circuit of a little grain, and this only on local markets. The retail shops would buy their grain from OPAM. They would have no interest in selling below the official price. But they would have an interest in buying below OPAM's wholesale price (prix de retrocession). The possibility would be limited by putting a brand name on the commodities.
>
> This brand name matter raises delicate problems. It seems that the short-term solution would be "micro-packaging" (micro-conditionement), for example, packaging in 5 or 10-kg bags. But the costs of this operation, which would have to be done all over the country in order to avoid raising transport costs by making grain shipments obligatory, is high at the same time that results are uncertain because of the difficulties of control.
>
> We are forced to recognize that there's a problem here: it will only be overcome when innovative actions will make OPAM's services superior to those of traditional trade...[1]

Other basic recommendations in the CEGOS Report have major inadequacies or inconsistencies, though perhaps none so fundamental as the one just described:

(a) The report recommends a rise in producer prices for foodgrains, but the rationale for this increase is nowhere explained or defended. In fact, the main thrust of argument is that a price rise is unnecessary (because marketed output is not price-responsive) and undesirable (since marketed output may come mainly from larger farm holdings).

(b) The report proposes the purchase at a fixed producer price of a given quota of grain, with the rest being bought at prices determined by harvest size. The incentive and equity effects of such a system are unclear, and are not much discussed in the report.

(c) The report proposes to subsidize farm-level storage, while making access to FGR grain stores cheaper and easier.

The CEGOS proposals were taken up by the Mali government, which created a commission to make recommendations on implementation. The

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[1] Author's translation.

report of this commission[1] supports the basic CEGOS proposal to strengthen the OPAM grain-marketing monopoly. It introduces a complex system of arrangements, however. In years of good harvests, private traders could act in legality at the wholesale level. When harvests are moderate or short, they would be prohibited from doing so. Thus the commission report estimates that in three years out of five, private traders would be restricted to retail sales; no private shipment of cereals of more than one ton would be allowed beyond the arrondissement level.

The enforcement of this prohibition of grain shipment presents mind-boggling administrative difficulties in West African conditions. The IPGP commission proposal requires control of all grain movements exceeding one ton -- i.e., ten sacks. But thousands of vehicles carry such quantities of grain in Mali. Every cart, every private vehicle, every bus, would be a potential violator of grain shipment prohibitions. Unless OPAM were to use only its own trucks, every private transporter would have to be given the appropriate papers, with specification of cargo and destination. Multiple check points would presumably be required. Some surveillance and control might be required at the local periodic markets, of which there are hundreds. Opportunities for administrative abuse and corruption would be abundant.

The economic disadvantages of systems of shipment control are well known. To the extent that these controls are effective, they raise prices in deficit regions and reduce them in surplus regions. They discourage production and marketing in the more productive zones and encourage local self-sufficiency rather than regional specialization. They raise prices generally by substantially increasing transaction costs for illicit grain movements, to the extent that these continue.

3. Liberalization

These recommendations to enforce the state's legal monopoly have

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[1] République du Mali, Institut de Productivité et de Gestion Previsionnelle, Rapport Final de la Commission Interministerielle Sur la Restructuration de l'OPAM, Août, 1976.

not been adopted by the Mali government, and since 1976 a third set of proposals has come forward, which recommends movement in the opposite direction - i.e., toward a greater role for private trade and a dilution of OPAM's monopoly status.

One of these proposals was not specific to Mali, but arose in the context of the Club du Sahel. The Grain Marketing, Price Policy and Storage Working Group of the Club commissioned a "diagnostic study" in 1976, which was done by the Center for Research on Economic Development of the University of Michigan. An early draft of the report of that study argued that basic improvement in the grain marketing situation in Mali (as in Niger and Upper Volta) required that the private trade be legally recognized and private traders encouraged. This recommendation was hotly debated at a meeting of the Club Working Group in early 1977, and was resoundingly rejected by that group, which consisted of representatives of the Sahel governments (many of them officials of state grain marketing monopolies) and several donor agency spokesmen. The final report made no recommendations; it rather defined a set of options; including liberalization, and assessed advantages and costs.

The most recent proposals come from a multilateral mission composed of representatives of five bilateral donors under the sponsorship of FAO.[1]

This mission report first stresses the gravity of the present situation in grain marketing and the urgency of the need for change. The "restructuring" of the cereals sector, it states, has become "imperative". Three reasons are given: the "excessive" annual budget deficits to which OPAM's "exorbitant indebtedness" makes a major contribution the present system's failure to encourage production, "which stagnates despite a vast potential", and its parallel failure to supply consumers with moderately priced foodgrains; the big differential in grain prices between Mali and her neighbors, which encourages smuggling so that even in a normal year

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[1] FAO, La Politique Cerealiere au Mali, Rapport preparé sur la base des travaux de la Mission Internationale place sous la coordination de H. de Meel, Rome, 1978.

(1977-78), the country had to call on food aid and commercial imports amounting to some 60,000 tons.[1]

The report rejects at the outset the possibility of an effective state monopoly, i.e., suppression of private trade. Traders are said to perform "indispensible functions;" "they will always exist because they have a useful and important function which cannot be otherwise performed".[2] The monopoly option is "unrealistic".

Three "practical" options are set out. The first is to give OPAM greater resources, allowing it to raise producer prices and also raise its marketing margins, so as to reduce its deficits. Retail prices would rise appreciably.

While this option is said to have numerous advantages (reduced OPAM deficits, reduced smuggling) it is rejected because it would require increased public expenditure, compensating wage increases and hence increased budget strains. It would also leave intact the double market system, which OPAM would be unable to dominate.

The second option is to turn the entire domestic grain market over to the private traders (who already have three-quarters of it anyway). OPAM would retain a monopoly of imports and exports and would manage the food security stocks.

The report lists many advantages for this option; it displays, in fact,a restrained lyricism about the results;

> The advantages of this option are first its simplicity and its economy. It costs the state little, since security stocks would continue to be externally-financed. OPAM's debts and structural losses would vanish. The right prices (la verité des prix) would prevail, and the role of private traders would be recognized. The double market would disappear. Smuggling would be discouraged in years of bad harvest, once local prices would rise. The supplying of towns and deficit zones in case of scarcity is assured by the state through its security stocks.[3]

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[1] FAO, op. cit., pp. 8-9.

[2] Ibid., p. 6.

[3] Ibid., p. 10.

But, says the report, the principal social objectives are not attained by this option: "...there is no guarantee that the cities will be properly supplied other than in periods of emergency, nor that retail prices will be affordable. Nor is there any guarantee that producers will receive remunerative prices in periods of abundance..."

For these reasons the mission proposes the adoption of a third option. Private trade will be legalized; traders will be licensed , and will compete in primary marketing with the opérations, and, to the extent possible, with the cooperatives. OPAM will control the market by buffer stock operations around a ceiling (retail) and a floor (producer) price. The floor and ceiling prices would be freed "in principle" for several years, but the report is vague on this point; it also calls for annual reconsideration of the prices. The report also proposes that the floor and ceiling prices be regionalized - set higher in deficit regions, lower in surplus areas.

There's little doubt that this multilateral donor/FAO report addresses fundamental issues and puts forward more operational and more promising proposals than the earlier reports. The private sector is legalized and given a central role. The proposals for market control stress indirect measures -- use of the market mechanism via purchases and sales from buffer stocks, rather than direct administrative measures. The report deals with broad strategy, not detail, and proposes a more deliberate, in-depth set of studies to guide implementation. The report comes with a stamp of approval, in some sense, of the five most concerned bilateral donors, so its impact and audience may be larger than is normally the case with such documents.

The proposals nonetheless present certain difficulties which threaten their viability. The sticking-point is price policy, in particular the scheme for inter-annual price stabilization.

Certain elements in the physical and economic environment in Mali put constraints on any price policy which stimulates supply above "normal" or "market-determined" levels. This is the case with policies which attempt to set higher-than-market prices for foodgrains, as it is for policies which aim at stimulating production by providing stable prices to producers. First, grain production is highly variable from year to year

because of wide annual variations in rainfall and the close dependence of harvest size on the volume and distribution of rainfall.[1] Secondly, marketed grain output -- the "disposable surplus" -- varies by even more than total output. A good harvest increases the surplus available for sale by a multiple of the increase in total production[2] Thirdly, the price elasticity of demand for foodgrains is probably relatively low -- i.e., consumption does not increase by much as price falls, nor fall by much as prices rise. This means that changes in marketed output tend to lead to sharp inverse changes in grain prices. Finally, in normal years, domestic production almost entirely staisfies domestic demand, i.e., net foodgrain imports are marginal. Opportunities for import substitution are small, since wheat is the only significant grain import, and is imported in relatively small quantities.

Assuming that grain production, and especially marketed supply, is responsive to price, a positive price policy -- one which sets producer prices at higher than market-determined levels, or maintains a stability of prices which stimulates output -- will generate "excess supply". The question of its disposal will have to be faced.

There are four main possibilities: the grain can be sold to consumers at a subsidized price: it can be stored for stabilization or emergency reserve purposes; it can be used in new ways -- as feed for cattle or poultry, for example, or it can be exported.

The first possible use of a price-induced "excess" cereals supply, sales on the domestic market, founders on the troublesome barrier of sluggish demand. Given the low price elasticity of demand for millet and sorghum -- the basic grains -- the consumer price would have to fall very low in order for consumers to absorb significant quantities of additional output. However, this implies subsidization if the "positive" producer price policy is to be

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[1] Cf. IBRD, West African Foodgrain Study, Sept. 1976, p. 25.

[2] If production is one million tons, of which 150,000 are marketed, a rise in production to 1.1 million tons will increase the saleable surplus by as much as 67%. Of course, some of the increase in production will be consumed by the producers, either because they formerly produced too little to meet their own needs or because they want to consume more grain as part of the general increase in income implied by the larger harvest. But it is probable that most of the increase will be sold.

maintained, and subsidization raises questions about equity, incentive effects and macroeconomic consequences for which there are no obvious answers in the present state of knowledge. The question of who benefits and who pays, for example, depends on the socioeconomic position of those who buy grain and those who sell. If it is true, as is sometimes claimed that the bulk of marketed millet output comes from a relatively small number of larger farmers, while pastoralists and deficit peasants in poor regions buy much of the marketed millet, then what is involved is a transfer of income from relatively poor to relatively better-off groups.[1]

On the incentive side, the higher food grain price may lead not to an expansion of aggregate agricultural production but to a change in the crop mix, with millet and sorghum being substituted for cotton and/or groundnuts. The macroeconomic effects of this change may not be positive -- e.g., national income will probably be lower and the balance of payments less favorable as a result. There are also budgetary implications, with revenues declining and expenditures rising as a result of the grain price and subsidy policy.

If the "excess" grain that is purchased one year can be stored and then sold the following year when the harvest is poor, the problem will be reduced but not eliminated. If producer prices are set above the long-run average market-determined price, there remains the problem of what to do with the induced increase in grain supply in the face of highly inelastic demand. If price stability as such provides incentives to higher production, there will be more output than otherwise. Moreover, it is not possible to postulate a nicely oscillating cycle of good years and bad. It is highly likely that there will be a number of successive good years before a bad one. In the absence of export markets, the accumulation of grain stocks is the most likely consequence. The costs of this storage, including costs of losses through infestation, spoilage and quality deterioration, are likely to be considerable.

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[1] There exists no study of this question in Mali, nor indeed are there many studies of it elsewhere. The CEGOS Report suggests that better-off farmers are responsible for much of marketed output.

Surplus foodgrains could conceivably find other uses, particularly given the relatively low prices at which they might be offered for non-food consumption. The most obvious and frequently mentioned possibility is in the area of feedgrain for poultry and cattle. This is certainly an interesting and important possibility, but is not clear that the potential feedgrain market is at present capable of absorbing more than a relatively small volume of grain.

There remains the export possibility, which is real. The recent West African Rice Study done by the Stanford Food Research Institute in conjunction with WARDA, indicates that Mali can export rice to the Ivory Coast at competitive and socially profitable prices, assuming world rice prices behave as now projected. The Sengalese rice market, dominated by much cheaper Asian broken rice, is more difficult to penetrate. On the other hand, Mali may be able to export millet/sorghum to Senegal and other neighboring countries.[1]

While export potentials certainly exist, there remain many uncertainties, and in all cases many obstacles to be overcome - in transport and in marketing in particular. The export possibilities for millet and sorghum seem less promising than for rice mainly because exporting surplus would be available in good years, when external demand is low. It would be imprudent to base a general foodgrains price policy on export potentials without knowing more about the nature and dimensions of these potentials.

We have thus far concentrated on price levels, not stabilization, which the FAO Report stresses. Many of the considerations above apply to the proposal to stabilize grain prices interannually. There are other reasons why interannual price stabilization is difficult, risky and expensive.

First, as noted earlier, marketed supply is a small proportion of total production and is subject to especially large changes as total

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[1] According to one estimate, Malian sorghum can be delivered in the interior of Senegal more cheaply than U.S. sorghum (1976 prices). The reason is that transport costs to Kaolack from Dakar, within Senegal, are substantial (S. Michaelof, Remarques Génerales sur la Commercialisation et la Politique du Prix des Cereales au Mali, Caisse Centrale de Cooperation Economique Services d'Etudes Economiques et Financiéres, Mars, 1977, p. 26).

production changes. Thus, interannual stabilization efforts will require considerable storage capacity relative to the total size and value of marketed output. An interannual stabilization effort is, in this sense, likely to be expensive.

Second, interannual grain stabilization has certain inherent contradictions. The presumed primary purpose of attempting to stabilize prices is to reduce the producer's uncertainty; fluctuations in price are believed to deter efforts to expand production. However, a price stabilization scheme which effectively reduces uncertainties could be sustained only at great cost, for it implies a support price that would be maintained over a period of years, regardless of harvest size. Such an inflexible support price would mean large storage costs, should there be a succession of good harvests. Moreover, if the reduction of farmer uncertainty leads to increased grain production and marketings, this too would have to be bought up by the stabilization agency in order to maintain the support price.

On the other hand, if the grain agency reduces its support price as annual harvests and market conditions change, it undermines its primary objective: reduction of producer uncertainty by reduction of price fluctuation.

Third, price stabilization schemes can be destabilizing if the stocks held by the stabilization agency are not large. If the harvest is bad, traders may recognize that sales from the buffer stock will be inadequate to maintain the official price ceiling. They will have nothing to lose by hoarding grain, while they await the inevitable rise in price when the buffer stock is exhausted.

Finally, the presumed incentive effects of stable prices remain unproved. One can argue that what Malian farmers need and want is an assured market, better marketing services, reduced exposure to arbitrary action and the right to sell grain at market prices. These kinds of changes would have a greater effect in stimulating production and marketed supply than would any price stabilization scheme.

Given the high costs, high risks of failure and limited benefits attached to interannual grain price stabilization schemes, it is unclear why such a scheme is proposed in the FAO Report. If the authors believed in the

importance and efficacy of such arrangements, they do not demonstrate it in the report. If its inclusion is tactical -- giving OPAM something so as to improve the general acceptability of the report, than it would seem to be an error. An intra-annual price stabilization scheme would have been tactically preferable. Such schemes, while not without problems, are easier to implement, less risky, and less costly. They might also have some genuine social benefits. If distress sales are common (peasants forced by indebtedness to sell at low prices immediatley after the harvest), an effective intra-annual price stabilization is more finely targeted in terms of reducing possible exploitation of peasants by traders due to imperfect markets and unequal bargaining power.

Despite its dubious recommendation of interannual price stabilization, the FAO Report provides a workable basis for meaningful reform, unlike many other reform proposals which have been made in Mali in the past few years. If the proposed ceiling (retail) price can be kept high enough, and the floor (producer) price low enough, the proposed fourchette idea may prove an ingenious device for giving freer play to market prices. What remains highly problematic is whether in time of short harvests the Mali government will allow official consumer prices to rise to the market-determined level, and whether it will allow OPAM to pay producers the market-indicated prices.

In this most recent set of reform proposals, as in many similar documents, one senses a divergence between what the report writers think is the best reform option and what they think it is feasible or politically acceptable to say. Few readers could fail to be convinced that the FAO Report's second option -- very limited government intervention in marketing and pricing -- is the favorite. Its advantages are listed at some length, and with enthusiasm. The countervailing reasons given for its rejection are perfunctory and not at all persuasive. Some of this may derive from the report's joint authorship. But it is more likely that the rejection of the essentially free market option represents a concession to "realism", a strategic choice deriving from some combination of diplomatic necessity and political assessment.

It may be that the rejection was "correct" in that the free market recomendation was inappropriate as well as imprudent. After all, the free

market solution is not easy to introduce, nor is it without risks and flaws. The one recent effort at real liberalization (in 1969) showed that it could only work as part of a basic transformation -- the generalized revision of all agricultural prices in line with market forces (including prices in neighboring countries) and the freeing of border trade. Timing is also critical; introduction of greater liberalization requires a favorable general economic environment -- good harvests in particular.

But the exigencies of an effective reform in the direction of liberalization is not the main point. It is rather that the hesitancy of reformers to take exposed positions on ideologically sensitive issues may be a serious long-term obstacle to marketing reform. For it has thus far prevented open discussion of the full gamut of policy alternatives and prohibits a serious consideration by Malian decision-makers of the full set of possible solutions to their country's marketing policy dilemmas.

F. External Support

Foreign assistance reduces the economic costs of maintaining the existing marketing arrangements, and in this sense impedes reform. Food aid (though of course necessary in time of crisis) reduces the impact of inadequate policy. More specifically, inflows of aid in the form of grain which is sold by OPAM, facilitates the generation of working capital for OPAM and thereby reduces the stresses of financial deficits caused by price policies and marketing/storage inefficiencies. Also, the existence of the line of credit available to Mali in the Opérations Account in Paris has generally diluted the negative impacts of grain marketing policy, as it has done with other economic policies, allowing the Mali government to maintain ineffective policies without having to fully suffer the consequences.

III. Conclusions

I have tried in this paper to outline the main problems of grain marketing policy in Mali and to indicate the obstacles to improvements in that policy. Mali is the focus of discussion because it is well documented, and because it is analytically simpler to discuss one country rather than the region as a whole. Much of what has been said is applicable elsewhere in

semi-arid West Africa.

Of the many general conclusions that emerge from this analysis, six seem worth special emphasis.

1. It is clear that the West African environment imposes numerous and severe constraints on public policy options in grain marketing. Total grain output is highly dependent on rainfall; hence it is variable. Marketed output is only a small share of the total and is potentially volatile in volume. The country is large in physical size; grain production is spread over vast areas; there are few specialized grain traders; traditional marketing is small in scale and dispersed in space. Frontiers are numerous and highly porous; traditional trade has always ignored them. The financial environment is similarly constraining. Budgets are in deficit. Expenditures are mainly on salaries, which are, moreover, under continual erosion in real terms. Little public money is available for materials, supplies, maintenance. The budget process is at once rigid and uncertain. Intrapublic sector accounts are in frequent disarray. On top of this there is limited availability of trained people, scarcities of organizational inputs and particular scarcities of coordination capacities. These physical, financial and organizational factors put down clear limits on what the Mali government can effectively implement, either in terms of price policies or direct state trading operations.

2. The present mixed system of marketing cannot be easily patched up. Stable coexistence between OPAM operating along its present lines and the private marketing sector requires effective price stabilization or abandonment of significant price support objectives, introduction of a much more refined price structure, abandonment of uniform nationwide pricing, harmonization of prices with neighboring countries. And after all this was done, most of the flaws and inequities of the present system would still be present.

3. Grain-marketing policies have probably had significant negative impact on grain production and the attainment of the priority objective

of food self-sufficiency. Uncertainty over prices and the availability of marketing services, and general market disorganization, have probably led to diversion of farmer effort to cash crops where this has been possible and may have led to a reduced farmer willingness to undertake greater efforts, or new ventures, in the grain production area. These effects have not been of larger magnitude, or at least more apparent, because of the partial nature of OPAM's monopoly -- i.e., the fact that the government has not been able to fully implement its policies. The substantial availability of food aid during the last decade has also been significant in diluting the effects of policy, as has the availability of credit from the French Opérations Account, which has indirectly financed OPAM's deficits by underwriting Mali's ongoing budget and balance of payments deficits.

4. The longer-term impact of the present marketing policies may be of greater significance than the impact on output in the short run. As things now stand, the development of true cooperatives is extremely difficlult. The existing cooperative organizations are instruments of government, used mainly for grain requisition purposes. So long as the requisition system endures, farmers will hesitate to set up organizations for defense of their interests (in the areas of storage, credit, and crop sales for example). So the democratic development of the countryside is impeded. Similarly, the development of trading competence, techniques and capital is severly obstructed, since traders presently operate with strong discouragement or at best, uncertainty. Finally, to the extent that marketing functions are transferred to the opérations de développement, the production-oriented activities of those organizations will be compromised. These opérations are highly dependent on foreign financing which cannot continue forever. They thus have a moment in history, so to speak, to help Malian farmers increase their productivity. Diversion from this effort, or weakening its effectiveness, could therefore have substantial effects on long-term development.

5. Of the many factors which have been responsible for the slow reform of the marketing system, two seem particularly critical. The first is the

lack of firm knowledge about how the grain markets actually function in Mali, due to a lack of basic studies. The sparsity of knowledge allows continued circulation of beliefs which may have little foundation in fact - such as belief in monopsonistic markets. In any case, it is difficult to frame suitable policies in the absence of better information and understanding about farmer decision-making, the pattern of grain selling and buying, the structure and functioning of grain markets, on farm storage economics, and the behavior of grain prices.

The second factor has been poor reform-mongering. Until very recently, the Mali government had not been presented with proposals which were well thought through and operational. Some have been highly management-oriented, indicating how OPAM could organize its work better. But these never addressed the basic problem of what OPAM's work could or should be. The most extensive reform proposals, those of the IDET/CEGOS Report, contained loose ends of a fundamental kind. They never showed how the full state monopoly which was proposed could be implemented. The Mali government commission which took the CEGOS recommendations the next step put forward an extraordinarily complex proposal involving exclusion of traders from wholesale trade during "bad" crop years, and a Draconian system of shipment control, to prevent movement of grain from surplus (low price) to deficit (high price) areas. Present proposals for reform are more viable, though there remain questions about the feasibility or desirability of key recommendations.

6. Certain policy implications should be clear from this discussion, though they have not been made explicit since it is not the purpose of this paper to propose policies but rather to make clear the nature of the problems and the obstacles to change. First of all, it is evident that no marketing reform can hope to succeed without allowing a fuller role to the private trading sector. It is equally evident that as noted in #1 above, scarcities of manpower and other critical inputs severly constrain what the state sector can effectively do; but it should at the same time be stressed that a state grain agency has a major role in grain marketing. It would manage a grain security stock; manage grain imports, particularly crisis imports; provide market information; and perform market inspecting functions. It

might buy and sell in the open market for special purposes -- e.g., localized production crises. It might operate a buffer stock for seasonal price stabilization. It could do grain storage extension work, especially for new grains such as maize. It could provide for the needs of collective consuming units, such as the army,

It is also equally obvious that major improvements in grain marketing can and will come from indirect measures: improvement and extension of feeder road networks; better information on crop size, prices, marketing, etc., and more effective spread of this information; closer attention to relaxing production constraints in foodgrains; improved policy analysis capacity within government; more basic studies about how grain markets work, about farmer behavior with respect to production decisions and crop disposal, about grain storage, about price bahavior in markets at different echelons of the distribution chain. More and better knowledge and changes which indirectly improve market structure and performance will widen the options for reform and increase the probability of adoption.